To: Mullin, Michelle[Mullin.Michelle@epa.gov]; Ramanauskas,

Peter[ramanauskas.peter@epa.gov]; Moore, Kendall[moore.kendall@epa.gov]

From: Mangino, Mario

**Sent:** Thur 5/5/2016 4:54:02 PM

Subject: RE: Air ELEs for schools- parent question about age levels

Thanks. We have it. (I confirmed with Linda Phillips that I have the correct version.)

Mario Mangino Toxicologist Land & Chemicals Div EPA Region 5 Chicago, IL 60604 312-886-2589

----Original Message-----From: Mullin, Michelle

Sent: Thursday, May 05, 2016 11:34 AM

To: Ramanauskas, Peter <ramanauskas.peter@epa.gov>; Mangino, Mario <mangino.mario@epa.gov>;

Moore, Kendall <moore.kendall@epa.gov>

Subject: FW: Air ELEs for schools- parent question about age levels

Attached is the PCB Exposure Estimation Tool, if you don't already have it.

Take care,

Michelle Mullin
PCB Coordinator
US EPA Region 10
1200 6th Avenue |Suite 900 | AWT-150
NOTE NEW MAILING ADDRESS
Seattle, WA 98101
mullin.michelle@epa.gov
206-553-1616
www.epa.gov/region10/pcb.html

----Original Message-----From: Phillips, Linda

Sent: Thursday, May 05, 2016 6:32 AM

To: Mullin, Michelle <Mullin.Michelle@epa.gov>

Cc: Thomas, Kent <thomas.kent@epa.gov>; McQueen, Jacqueline <McQueen.Jacqueline@epa.gov>; Guiseppi-Elie, Annette <Guiseppi-Elie.Annette@epa.gov>; D'Amico, Louis <DAmico.Louis@epa.gov>;

Courtnage, Robert < Courtnage.Robert@EPA.GOV>

Subject: FW: Air ELEs for schools- parent question about age levels

Hi Michelle - Kent Thomas forwarded your message to me. I agree with Kent that Q&As 25-31 will answer some of your questions, but the PCB Exposure Estimation Tool itself will also be helpful because it provides all of the assumptions, literature references etc. that were used to support the development of the ELEs. Background information on the Tool is provided in Tab B of the attached spreadsheet. All of the values and assumptions used in the calculations for the various age groups are in shown Tab D, and the literature references used are in Tab H. I am attaching the PCB Exposure Estimation Tool (Excel spreadsheet) to this email in case you do not already have it. The Tool provides calculations for 6 age groups of children and adult staff, but does not specifically address pregnant or lactating women. The

 Tool can be used to easily estimate site specific values by changing some of the parameter values on Tab D; results will be automatically calculated and presented on Tab E. I hope this information is helpful. Please let me know if you have further questions. Linda

Linda J. Phillips, Ph.D.

National Center for Environmental Assessment Office of Research and Development U.S. Environmental Protection Agency Potomac Yard South, Room 11785

Telephone: (703) 347-0366 email: phillips.linda@epa.gov

Mailing Address:

1200 Pennsylvania Avenue, NW (8623P)

Washington, DC 20460

----Original Message-----From: Thomas. Kent

Sent: Wednesday, May 04, 2016 2:25 PM To: Phillips, Linda < Phillips. Linda @epa.gov>

Cc: McQueen, Jacqueline <McQueen.Jacqueline@epa.gov>; Guiseppi-Elie, Annette <Guiseppi-

Elie.Annette@epa.gov>

Subject: FW: Air ELEs for schools- parent question about age levels

## Hi Linda:

Please see the public questions on the Exposure Levels for Evaluating PCBs in Indoor School Air forwarded by Michelle Mullin in Region 10 below. As you can see from my response to her, I alerted her to the information in the EPA Q&As document, which I think answers some of the questions. I also told her I would forward this to NCEA to see if there is anything else to be added. I understand you may need to discuss with others in your organization, including your communications staff.

Please let me know if you have any questions.

Thanks, Kent Thomas

----Original Message-----From: Thomas, Kent

Sent: Wednesday, May 04, 2016 2:20 PM

To: Mullin, Michelle < Mullin. Michelle@epa.gov>

Cc: Ramanauskas, Peter <ramanauskas.peter@epa.gov>; Moore, Kendall <moore.kendall@epa.gov> Subject: RE: Air ELEs for schools- parent question about age levels

Hi Michelle:

The ORD National Center for Environmental Assessment was the lead organization in developing the air ELEs. I think some of the answers are available in the Q&As posted on the EPA web site in 2015. Specifically, see the answers to Questions 25 - 31 (https://www.epa.gov/sites/production/files/2016-03/documents/pcbs\_in\_building\_materials\_questions\_and\_answers.pdf).

I will also forward this to colleagues in NCEA to see if they have anything they want to add.

Best wishes, Kent Thomas

-----Original Message-----From: Mullin, Michelle

ED\_001594\_00075577 EPA\_002932

Sent: Wednesday, May 04, 2016 2:07 PM To: Thomas, Kent <thomas.kent@epa.gov>

Cc: Ramanauskas, Peter <ramanauskas.peter@epa.gov>; Moore, Kendall <moore.kendall@epa.gov> Subject: Air ELEs for schools- parent question about age levels

## Hi Kent-

We've had a school in our region conduct some air sampling as a result of parent and teacher complaints, after light ballast failures. R10 and R5 are addressing the remediation at this school jointly, after R5 conducted the inspection **Ex. 5 - Deliberative Process** I have copied Peter and Kendall from R5 as well.

A parent has asked me the following questions that I cannot answer about the ELEs, I thought that you might be able to answer, because I thought you were involved in creating those ELE calculations/levels, etc. Please let me know if I need to reach out to someone else. Her questions:

"How were these limits for these ages formulated? I know that most chemical limits are based on the average adult when it comes to STELS and TLV in an industrial setting. So how were these limitations for children set?? What calculations and past references were used to determine this? And are they based on the "Average" child at that age?"

I believe she spoke with someone from our regional children's health department and is concerned that her children are below average weight- so I think she is probably wondering if these limits apply to smaller than average children, or if something more protective should be applied.

I'm also curious- are there ELEs for pregnant or nursing women? Or is it possible to set those on a site-specific basis?

## Ex. 5 - Deliberative Process

## Background:

Results from the school's consultant report are this: (note that EPA was not involved in the preparation of the sampling plan, or review of any sample collection procedures or QA- essentially- we have no control over this data or surety of how it was collected for quality purposes)

7 TOTAL samples >100 ng/m3 (ELE for ages 1-3 years old) Montessori Science Prep (sample #005), Annex Hall East (sample #062) (Aroclor 1242), Annex Girls Restroom (sample #060) (Aroclor 1242), Room F (Aroclor 1242)

3 samples >200 ng/m3 (ELE for ages 3-6 years old) Rooms A (Aroclor 1242), D (Aroclor 1242), and Annex Hall West (sample #056) (Aroclor 1242)
0 samples >300 ng/m3 (ELE for ages 6 and above)

Each room had one air sample collected. Samples were collected in February, 2016.

Thanks for any help you can provide.

Sincerely,

Michelle Mullin PCB Coordinator US EPA Region 10 1200 6th Avenue |Suite 900 | AWT-150

ED\_001594\_00075577 EPA\_002933

NOTE NEW MAILING ADDRESS Seattle, WA 98101 mullin.michelle@epa.gov 206-553-1616 www.epa.gov/region10/pcb.html